ABSTRACT OF THE DISCLOSURE

A starter motor assembly is provided. A motor housing encloses an electrical motor having a rotatable armature shaft. A rotatable drive shaft is provided that is engageably linked with the armature shaft. A pinion assembly is also provided, which includes a pinion that is engageable with the drive shaft for turning a flywheel of an engine. A solenoid assembly is provided, which includes a plunger. The plunger, when the solenoid assembly is energized, is moved in an axial direction to close electrical contacts to start the electrical motor and to move the pinion into engagement with the engine flywheel. Once the engine is cranked and the solenoid is deenergized, a return spring moves the pinion away from engagement with the engine flywheel. The return spring of the present invention moves the pinion without utilizing contact between the spring and the pinion (or any pinion shaft) to move the pinion away from engagement. Thus, the spring may be positioned around the pinion shaft without contacting the pinion shaft.

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